

a full assignment, the user is preferably prompted to enter a new Party A or Party B. The original ticket with amended Party A or Party B is then sent through the workflow. In the case of partial assignment,  
5 user is preferably prompted for the assigned notional amount and the new Party A or Party B for the assigned amount. A new Deal in Progress for the assigned amount may then be authorized by the trader and sent through the workflow. The original ticket with amended  
10 notional amount is then sent through the workflow.

An audit trail of all changes made to an authorized deal may be maintained. Each time a proposed edit to a deal is applied by a trader, a static copy of the historical version of the deal is  
15 stored on the database. The user can display a dialog box summarizing the changes. The user can also select any change with the mouse and display a complete historical version of the deal. The user can further display a dialog box summarizing the deal's current  
20 state and an audit trail of its state transition history. The state transition history records state transitions, the name of the user initiating the state transition, and the time it was initiated (see Fig. 10). The confirmation status of the deal may also be

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displayed, including whether the confirmation has been sent, or signed and returned. This feature thus permits a client to access the state transition history of a deal.

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#### FILE PROCESSING

This section describes a preferred method of processing files in the system of the present invention. Files may be Custom Templates, Deals in Progress, or authorized deals.

New files in the system may be created as Deals in Progress or Custom Templates. A Deal in Progress is created when a System Template, a Custom Template, or an authorized deal is saved by the user as a Deal in Progress. A Custom Template is created when a System Template, a Custom Template, or an authorized deal is saved by the user as a Custom Template. This method of Creating New Files allows a user to open an existing file for the sole purpose of saving it as a new file owned by that user.

Users may browse files across all states in the system, may filter on approximately 50 fields (see Fig. 9), and may specify which fields are included in the result set. In addition to being able to drill

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down to the deal level directly from the file browser, the user can save favorite queries, and print or download result sets to a spreadsheet. In addition, the user can quickly re-access the four most recently 5 used files in system.

System files may be opened by users in Write Mode, or in Read-only Mode. Whether a file may be opened, and it what mode it may be opened, is dependent on File Edit Permissions and File Write Lock. When a 10 deal is open in Write Mode all system fields that a user has Edit Permissions for are editable. When a user attempts to open a file in Write Mode, the system checks whether that user already has another deal open for writing, or whether a second user has the same deal 15 open for writing. If the first user already has a deal open for writing, the user is advised that two files cannot be simultaneously open for writing. The user then has the option of either closing the first file, or of opening the second file in Read-only Mode. If a 20 second user has the same file open for writing, the first user is informed of the time the file was write locked, and the identity of the second user. The first user has the option of opening the second file in Read-only Mode.

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File edit permissions are determined by deal state and user profile. When a user attempts to open a file in Write Mode, the system checks whether that user has permission to edit that file based on the functions associated with the group to which the user belongs.

The system preferably checks whether the file is editable based on the state in which the deal is. In either case, the user is advised that the file is not editable, and the reason it is not editable. The user then has the option of opening the second file in Read-only Mode. When a deal is open in Read-only Mode, no system fields are editable.

Custom Templates and Deals in Progress are treated as the property of the user that creates them.

Ownership of a Custom Template implies the ability to view it, to edit it, or to change viewing permissions, while ownership of a Deal in Progress implies the ability to view it, to edit it, or to enter it into the workflow. Files are generally viewable by all users through the deal browser, with the exception of Custom Templates and Deals in Progress. Since each user may be maintaining a number of Custom Templates and Deals in Progress, viewing will initially be limited to the file owner. Users can transfer Custom Template

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ownership to another user. This function is typically invoked if first user no longer wanted to maintain or control access to the Custom Template. Users also can share Custom Templates by opening up view permissions to other users. A user with view permissions would not be allowed to edit a Custom Template, but would be able to save and become the owner of a new version of it. Deal in Progress ownership and view permissions are changed in the system workflow as a Deal in Progress Transfer, described above.

Files that are open for writing may be "closed clean". If the file was open in Read-only Mode, the file will be dismissed from the screen. If the file was open for writing, the user will be prompted to save changes.

#### PAYMENT AND RISK MANAGEMENT VIEWS

This section describes a preferred payment and risk management views of the system of the present invention. The Payment (Customer) View of the deal is the way the deal is captured in system, and the way the deal is preferably referenced in documentation between the investment bank house and the counterparty. The Risk Management View of the deal is the way the legs of

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a deal must be broken up on the investment bank's risk management and payment systems. The system captures both views, as follows.

The payment view of a deal is created as deal  
5 information is captured. This is the default view in the system. Initially, the Risk Management View and the Payment View are the same. This is because in the case of generic deals, the payment legs of a deal may be acceptable as risk management legs. The Middle  
10 Office reviews all payment legs to verify that they can be booked in risk management systems. If a payment leg cannot be used as a risk management leg, however, the Middle Office has to create risk management legs in System. Middle Office users are then required to  
15 specify which risk management system on which each risk management leg is booked. When a deal is opened in Write Mode or in Read-only Mode, the Payment View will be presented. The user can switch to the Risk Management View by selecting a menu item. When the  
20 Risk Management View is being displayed it is preferably prominently indicated on the screen.

This section describes the administrative functions preferably implemented in the system of the present invention. These administrative functions ensure that system security is enforced, that deal 5 information is captured correctly, that new product types are identified and accounted for in the template structure, and that tickets move smoothly through the workflow.

- User preferences are user level
- 10 administration functions that allow customization of default settings, workflows, and filter criteria. The User Profile contains information about each user's System administrative privileges and group membership. This information is viewable at the user level, but 15 editable only by someone with User Profile Administration privileges. Middle Office administrative users are preferably responsible for creating, updating, and deleting system User Profiles. Middle Office administrative users are also preferably 20 responsible for maintaining system User Groups. This includes defining system privileges for each User Group and assigning individual users to User Groups.

Middle office administrative users are also preferably responsible for creating, updating, and

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deleting system System Templates, and monitoring the comment field of all deals for information that cannot be captured on an existing Template. If the data could have been captured on an existing Template, the user

5 generates a proposed edit; otherwise, the user either adds an existing field to a System Template, or defines a new field and adds it to the System Template. By adding a new field, an existing System template may be modified, or a new System template may be created. The

10 ticket may then be re-submitted for Trader Authorization as a proposed edit as described above, and the comment field is empty.

To ensure that tickets are processed in a timely manner, middle office administrative users

15 preferably monitor the number of deals in the workflow in each state. Using the file browser, they can view deals across all states.

#### ADDITIONAL FUNCTIONS

20 This section describes certain additional functions which may be implemented to enhance the capturing and processing of deals, as described above. First, system users can print files open in Write Mode or Read-only Mode, and can select and deselect deal

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components to be printed through a dialog box. In addition, users can define the output format of the printed ticket. All print selections are viewable through a print preview function. Further, the system  
5 can generate "drop copies" of tickets at specified times, such as state transitions.

If a file is open for writing, the user may be allowed to discard any changes made to the file since it was opened by invoking a "revert to last saved  
10 version of a file" function. A dialog box asks the user to confirm the action and advises that any changes will be lost. If confirmed, the file is then closed without saving changes and the last saved version is re-opened.

15 If a file is open for writing, the user may be allowed to return all fields to their defaulting values by invoking a "revert to field defaults" function. A dialog box asks the user to confirm the action and advises that any changes to fields with  
20 defaulting values will be lost.

If a file is open for writing, the user may be allowed to clear all data, including defaulting values, from fields on the file by invoking a "clearing all fields" function. A dialog box will ask the user

to confirm the action and advise that any data in fields will be lost.

Generic text edit functions, such as those typically found in Microsoft applications, are made 5 available to the user. For example, the user may cut, copy, and paste text items.

Based on captured trade data, a graphical flow diagram of all legs is generated for viewing and printing.

10        While the present invention has been described in detail with reference to the preferred embodiments thereof, many modifications and variations thereof will be readily apparent to those skilled in the art. Accordingly, the scope of the invention is 15 not to be limited by the details of the preferred embodiments described above, but only by the terms of the appended claims.